



ROLAND KEYBOARDS

AXIS-1 MIDI KEYBOARD



SUPER JUPITER MKS-80 SYNTHESIZER MODULE



REAR PANEL



"Jupiter" synthesizers have always been the best performance-oriented synthesizers, because of their durability, versatility, and unsurpassed sound quality. Roland's advanced synthesizer technology combined numerous features of the "Jupiter" synthesizers with many other new features in the compact, rack-mountable "Super Jupiter" MKS-80. The "Super Jupiter" MKS-80 can meet all the severe demands of professionals just as "Jupiter" synthesizers have before.

The MKS-80 is an 8-voice polyphonic programmable MIDI synthesizer module. It can be controlled by any MIDI sending unit, the MKB-series MIDI keyboard controller, AXIS-1, MIDI sequencer or a personal computer. It can also respond to MIDI velocity and pressure messages. All the legendary "Jupiter" sounds can be produced with dynamics for more powerful, more expressive sounds than ever before. MIDI velocity message is used to control the loudness and the attack time of the envelope. The control range can be adjusted individually to control loudness and attack time. The settings for the controls can also be memorized. The Dynamics Sens control adjusts the sensitivity at which the MKS-80 responds to the message. And MIDI pressure message is used to control the pitch of the VCO and the cutoff frequency of the VCF. The After Touch Sens control determines the control range.

The MKS-80 offers 192 patches and 192 patch preset pairs. The MKS-80 itself stores 64 and the accessory M-64C memory cartridge stores 128. All patches and patch preset pairs can be freely modified by the Edit function and can be recalled by MIDI program change messages.

The MKS-80 features 16 VCOs, 8 VCFs, 8 VCAs, 16 ENVs. The 16 VCOs can be completely tuned in an instant by the Auto Tune function. The Envelope reset switch allows the envelope to raise from zero every time it is triggered. The Unison Detune function allows the MKS-80 to produce extremely thick sounds—when the MKS-80 operates in the Unison mode, the pitch of each VCO is slightly shifted. Octave transpose is also possible from two octaves below to two octaves above in one-octave steps.

Numerous patch parameters are provided for advanced sound creation. All parameters can be controlled using front panel controls or the optional MPG-80 programmer. The Save/Load function allows the data for parameters to be transmitted through MIDI. The parameters can be controlled by either of two connected MKS-80's. By connecting the MKS-80 with a computer, a variety of other amazing possibilities are offered. For example, the parameters can be controlled by a computer keyboard and the data for parameters can be displayed on a screen and can be stored in a computer.

SPECIFICATIONS

•Internal Memories: 64 Patches, 64 Patch Preset Pairs •External Memories (M-64C Memory Cartridge): 128 Patches, 128 Patch Preset Pairs
•Parameters: See the MPG-80 specifications •Controls: Tune (± 50 cents), Volume, Dynamics Sens •Switches: MIDI Function (I/II/III), Save/Load Mode (Cartridge/MIDI), Protect (On/Off), Memory Area (Internal/A/B), Contrast
•Buttons: Auto Tune, Save, Load, Write/Execute, Tone, Patch, Upper, Lower, Parameter Forward, Parameter Backward, Value Up, Value Down, Bank $\times 8$ (1 to 8), Number $\times 8$ (1 to 8), MIDI Channel Select •LEDs: Omni, Poly, Mono, MIDI Message •Liquid Crystal Display: 1 •Memory Cartridge Slot: 1 (for M-64C) •Jack: Headphones •Rear Panel: Input Select switch

(MIDI/Programmer), Output Level Select switch (H/M/L), Output Mode Select switch (Mix/Lower and Upper), DIN Connectors (MIDI In, MIDI Out, MIDI Thru, Programmer In), XLR Connectors (Balanced Upper Output, Balanced Lower Output), Phone Jacks (Unbalanced Upper Output, Unbalanced Lower Output) •Dimensions: 480(W) \times 400(D) \times 88(H) mm (18-7/8" \times 15-3/4" \times 3-7/16"), 19" rack-mountable (EIA-2U) •Weight: 8 kg (17 lb. 10 oz.)

•Accessories: Connection Cord $\times 2$, MIDI Cable (5-pin DIN, 1 m), M-64C Memory Cartridge, Power Cord

SUPER JUPITER PROGRAMMER MPG-80



The MPG-80 programmer is designed exclusively for use with the MKS-80 and allows easy modification of memorized patches and quick creation of new patches. All parameters on the MKS-80 can be controlled by the MPG-80. Connection requires only one cord.

The MPG-80 can be mounted on a 19-inch rack with other modules, or placed on the MKB keyboard controller so that the player can easily reach all parameter controls.

SPECIFICATIONS

•LFO-1: Rate, Delay, Waveform (/ \ , \ / , \ / \ , Random) •VCO Modulation: LFO-1 Depth, ENV-1 Depth •Pulse Width Modulation: Pulse Width (0 to 50%), Modulation Depth, Mode Select (ENV-1, LFO-1, Keyboard), Polarity (Normal, Invert) •VCO Key Follow: Key Follow (0 to 100%), VCO Select (VCO-1/Off/VCO-2) •Cross Modulation: Manual Depth, ENV-1 Depth, ENV-1 Polarity (Normal, Invert) •VCO-1: Modulation (Normal, Off, Inverted), Range (32' to 2'), Waveform (/ \ , \ / , \ / \ , Noise) •VCO Sync: 1 to 2, Off, 2 to 1 •VCO-2: Modulation (Normal, Off, Invert), Range (Low, 32' to 2', High), Fine Tune (± 50 cents), Waveform (/ \ , \ / , \ / \ , Noise) •Mixer: VCO-1 and VCO-2 •HPF: Cutoff Frequency •VCF: Cutoff Frequency, Resonance, ENV Modulation Depth, ENV Select (ENV-1, ENV-2), ENV Polarity (Normal, Invert), LFO-1 Modulation Depth, Key Follow •VCA: ENV-2 Level, LFO-1 Modulation Depth •Dynamics: Time, Level •ENV Reset Switch: On/Off •ENV-1: Dynamics (On, Off), Attack Time, Decay Time, Sustain Level, Release Time, Key Follow •ENV-2: Same as the ENV-1 •Key Mode: Mode Select (Whole, Split-1, Split-2, Dual), Split Point (A₄ to C₅) •Balance: Upper and Lower •Octave Shift: +2, +1, 0, -1, -2 •Assign Mode: Mode Select (Solo, Unison-1, Unison-2, Poly-1, Poly-2), Unison Detune, Hold (MIDI, On, Off) •Glide: Portamento Time •Bender: Sensitivity, VCO-1 Bend (Wide, Normal, Off), VCO-2 Bend (Wide, Normal, Off) •After-Touch: Sensitivity, Mode Select (VCO, VCF, LFO-2 Rate) •Programmer Channel: 1 to 16
•Buttons: Tone Manual, Patch Manual •Connectors: Programmer Out, MIDI In, MIDI Thru •Dimensions: 480(W) \times 78(D) \times 177(H) mm (18-7/8" \times 3-1/16" \times 6-15/16"), 19" rack-mountable (EIA-4U) •Weight: 3 kg (6 lb. 10 oz.)
•Accessory: 6-pin DIN Cord

PLANET-S MKS-30 SYNTHESIZER MODULE



REAR PANEL



The MKS-30 is a 6-voice polyphonic, programmable, dynamics-responsive synthesizer module. Its compact, rack-mountable (EIA-2U) package includes 12 DCOs, 6 VCFs, 6 VCAs, 6 ENVs, extensive modulation controls, Stereo Chorus circuitry, and many more exciting features. It can be controlled by any MIDI sending unit and can be used in a variety of ways—as a sound source for MKB keyboard controller, AXIS-1, or MIDI sequencer, or to add synthesizer sounds to the Roland Piano electronic pianos. A headphone jack is provided for monitoring.

The MKS-30 can respond to MIDI velocity message to control dynamics. A switch on the front panel determines whether or not the MKS-30 responds to the message. Hold, Pitch Bending, and Modulation can be controlled by MIDI messages. It is also possible to determine whether or not the MKS-30 responds to MIDI messages for these operations.

The MKS-30 can store 64 different patches (eight patches in eight banks). The accessory M-16C memory cartridge provides 64 more patches. A switch on the front panel selects the MKS-30 memory or the M-16C cartridge memory. Thus, the MKS-30 provides a total of 128 patches. The patches can be recalled by MIDI program change messages. An Edit function allows memorized patches to be freely modified by recalling a parameter then changing the value or status of the parameter using controls on the front panel. When the optional PG-200 is used, you can quickly modify the memorized patches or create new patches.

SPECIFICATIONS

- Elements: 12 DCOs (two per voice), 6 VCFs, 6 VCAs, 6 ENVs, 32 parameters
- Memories: 64 Internal Patches, 64 External Patches (M-16C)
- Register: Responsive to 88 keys
- Controls: Number, Bank, Parameter, Value Up, Value Down, Write/Copy, Save, Load, Cartridge, Protect, MIDI Channel Set, Dynamics On/Off, Brilliance, Tune (± 50 cents), Volume
- Jacks: Mono Output, Stereo Output, Headphones
- Connectors: MIDI In, MIDI Thru, Programmer In
- Switch: Output Level Select (H/M/L)
- Dimensions: 480(W) x 410(D) x 88(H) mm (18-7/8" x 16-1/8" x 3-7/16")
- Weight: 6.2 kg (13 lb. 11 oz.)
- Accessories: Connection Cord x 2, MIDI Cable (5-pin DIN, 1m), 6-pin DIN Cord, M-16C Memory Cartridge, Power Cord

PG-200 PROGRAMMER



Connected to the MKS-30 by a single cable, the PG-200 allows you to easily and quickly modify the memorized patches or create new patches.

- Dimensions: 244(W) x 172(D) x 45(H) mm (9-5/8" x 6-3/4" x 1-3/4")
- Weight: 1.4 kg (3 lb. 1 oz.)
- Accessory: 6-pin DIN Cable

PLANET-P MKS-10 PIANO MODULE



REAR PANEL



The MKS-10 is a 16-voice polyphonic piano sound module controlled by a MIDI sending unit, such as an MKB keyboard controller, AXIS-1, MIDI synthesizer, sequencer, or computer. Its register is broad enough to be controlled by an 88-key keyboard controller. On stage or in the studio, the MKS-10 offers realistic sounds and superb convenience. It can be mounted on a 19-inch rack (EIA-2U) with other rack-mountable devices to form a sophisticated set-up.

Eight different instrument sounds are provided—two Piano sounds, two Clavi sounds, two Harpsichord sounds, and two Electric Piano sounds. To perfectly duplicate the original sound, the waveforms of each instrument have been analyzed and synthesized over several frequency ranges using a computer. Thus, the MKS-10 smoothly changes tone color in proportion to changes in pitch. Chorus, Flanging, and two different Tremolo effects are provided. All effects can be tailored using Rate and Depth control. A Brilliance control is also provided to add brightness.

The MKS-10 stores 128 different sounds made by combining 8 instrument sounds, 4 different effects, and short and long release times. The sound can be recalled by the MIDI program change messages. The MKS-10 can respond to MIDI velocity message to control both loudness and tone color and to MIDI control change message for operations of both damper and soft pedals.

SPECIFICATIONS

- Sound Select Buttons: Piano I, Piano II, Clavi I, Clavi II, Harpsichord I, Harpsichord II, Electric Piano I, Electric Piano II
- Effect Buttons: Chorus, Flanger, Tremolo, Tremolo Depth, Tremolo Rate, Tremolo Depth
- Jacks: Stereo Output, Mono Output, Headphones
- Connectors: MIDI In, MIDI Thru
- Switch: Output Level Select (H/M/L)
- Dimensions: 480(W) x 400(D) x 90(H) mm (18-7/8" x 15-3/4" x 3-9/16")
- Weight: 10 kg (22 lb. 1 oz.)
- Accessories: MIDI Cable (5-pin DIN, 1m), Connection Cord x 2, Power Cord

SUPER JX (JX-10) POLYPHONIC SYNTHESIZER



Roland's analog/digital hybrid technology has created one of the world's most advanced synthesizers—the SUPER JX. Combining the advantages of analog and digital technologies, the SUPER JX can produce either clear, percussive digital sounds or broad, deep analog sounds. You get the best of both worlds—digital accuracy and analog flexibility. By dramatically expanding the synthesizer's scope of expression, the SUPER JX offers limitless creative possibilities in all music situations, from live performances to studio recordings.

The SUPER JX has a 76-key keyboard that is split in a new way: the lowest note of the upper part and the highest note of the lower part can be individually set. The lower and upper parts can even be overlapped. The SUPER JX thus offers a wider note range than other splittable 76-key keyboards. The keyboard is velocity and pressure sensitive and the keys are weighted so the player can precisely and expressively control the sound using his own unique keyboard techniques. The SUPER JX also offers two special operation modes—Touch Voice and Cross-Fade. These modes allow two different tones to be changed, mixed or balanced by key touch. The result is even more expressive synthesizer playing. In the Touch Voice mode, two different tones can be changed by key touch: a stronger key touch produces the upper tone and a weaker one produces the lower tone. In the Cross-Fade mode, the volume balance between two different tones can be controlled by key touch. A weak key touch produces only the lower tone. As the key touch becomes stronger, the lower tone fades out and the higher tone becomes louder.

The SUPER JX is a 12-voice polyphonic synthesizer using two DCOs and two Envelope Generators to produce each voice. (Twenty-four DCOs and 24 Envelope Generators are provided.) The SUPER JX produces more impressive and realistic sounds than other synthesizers. This is possible due to Roland's unique dynamics-responsive DCO mixing control via the envelope generator as well as other modulations including cross-modulation and DCO syncing. In the frequently used Dual

mode, 4 DCOs are activated by a single key, layering one sound over another. In addition, the SUPER JX offers a brand-new Chase Play function in the Dual Mode. When this function is engaged, the tone assigned to the lower part is delayed while the tone assigned to the upper part is produced in real-time as the keys are pressed. A variety of delay effects can be obtained. Four programmable factors are provided to create the desired "Chase Play" effect. For greater flexibility in sound processing, four output jacks are provided—two for the lower part and two for the upper part.

The SUPER JX offers 50 preset tones and can also store 50 programmable tones. All 100 tones can be accessed instantly. Extensive parameters are provided to freely create programmable tones. For instance, the dual DCOs can be mixed, synced, or cross-modulated. And several parameters can be dynamically controlled. Any parameter can be selected and its value can be determined using a single α -Dial. It is also possible to adjust several parameters simultaneously by connecting an optional PG-800 Programmer to the SUPER JX.

What essentially makes the SUPER JX different from other synthesizers is the patch memory function. Forty patch memory factors are provided to set a variety of functions such as Key Mode, Split Point, Touch Voice, Cross-Fade, Chase Play, and MIDI. One complete setting of the 40 patch memory factors can be stored as the patch memory. The SUPER JX can store 64 such patch memories. By offering a variety of playing capabilities, the patch memory function makes the SUPER JX perfect suited to meet every musician's needs and any playing style.

In addition to the SUPER JX's internal memory of 100 tones and 64 patch memories, 50 programmable tones and 64 patch memories can be stored in one M-64C memory cartridge. The cartridge memory or the internal memory can be instantly selected.

The SUPER JX also features a built-in sequencer. The sequencer data is written in the SUPER JX by real-time loading then stored in memory cartridge. Roughly 400 notes



can be stored in the supplied M-16C and about 1,600 notes in the supplied M-64C. (The M-64C can't simultaneously store the sequencer data and the tone and patch memory data.)

An easy-to-use bender/modulation lever is provided. Four bending range intervals (major second, minor third, major third, and perfect fifth) can be set in real-time using a sliding switch or pre-programmed in the patch memory. In addition to the bender range setting, the patch memory can store the on or off status of the bender for the upper and lower parts of the keyboard.

For greater flexibility, the SUPER JX has three function-assignable controls—two sliding controls (C1 and C2) located beside the Master Volume control plus the pedal switch connected to the Control Assign jack on the rear panel. C1 and C2 can be used to control the volume balance between the upper and lower parts, as well as total volume, portamento time, and the volume of the MIDI device assigned to the upper or lower MIDI channel. The pedal switch can be used to control the patch shift, chase play, portamento, upper hold, or lower hold.

The SUPER JX can also function as one of the most advanced MIDI keyboard controllers to completely control even the most complicated MIDI set-ups. A variety of MIDI functions can be programmed in the patch memory or controlled in real-time.

The SUPER JX features a large 32-digit fluorescent display to facilitate the operation. The display can indicate a variety of information including the name of the tone (up to 10 characters), the name of the patch memory (up to 18 characters), the tone parameters, the patch memory factors, and the setting of the MIDI functions. You can select the information to be displayed even while you play the SUPER JX.

REAR PANEL



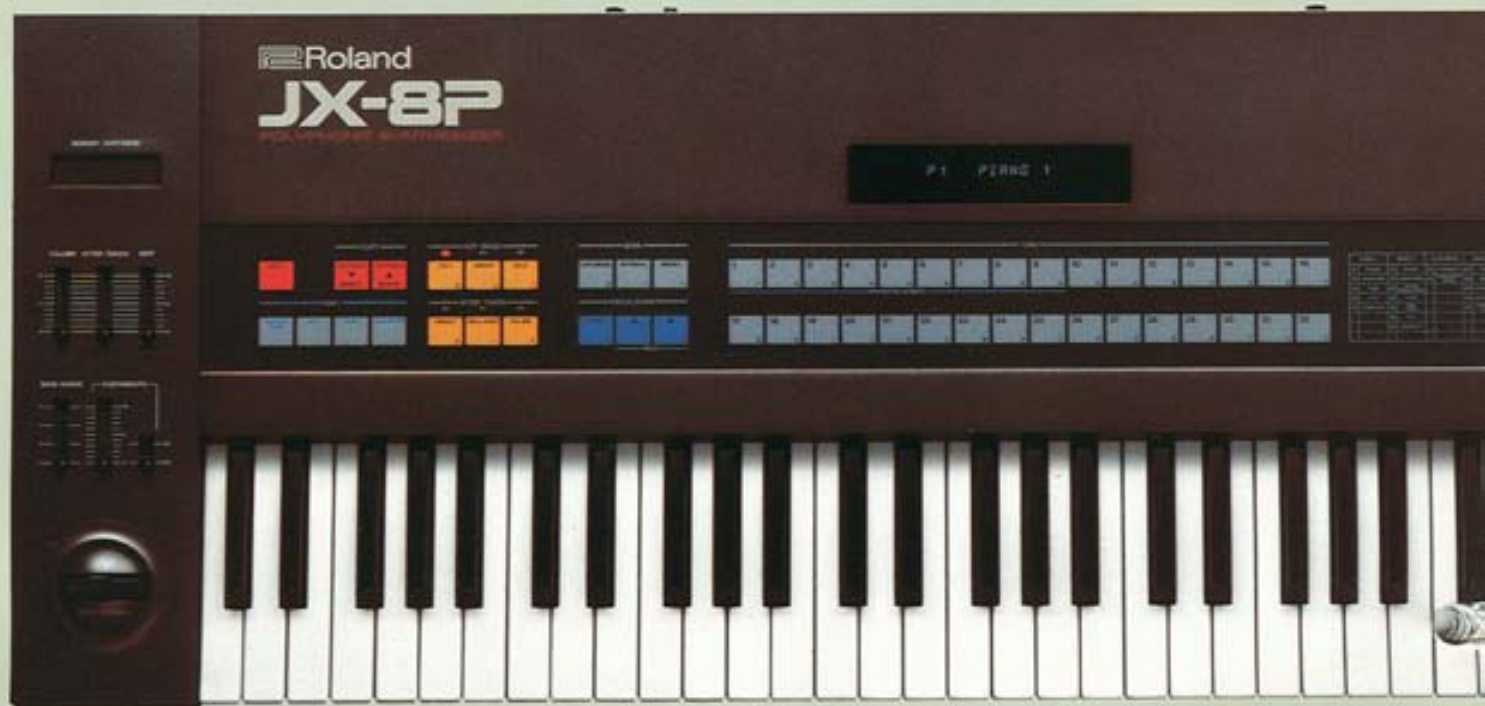
SPECIFICATIONS

- Keyboard: 76 Keys •Memory: Patch Memory (64 Patch Memories in the Internal Memory, 64 Patch Memories in the M-64C Memory Cartridge), Preset Tone (50 Tones), Programmable Tone (50 Tones in the Internal Memory, 50 Tones in the M-64C Memory Cartridge), Sequencer Data (Approx. 400 notes in the M-16C Memory Cartridge, Approx. 1,600 notes in the M-64C Memory Cartridge) •Edit: Patch Memory Factors, Tone Parameters, MIDI Functions, Name, Master Tune •Touch Pads: Numerical Keys (0 to 9, Enter), Patch Memory Select (A to H, 1 to 8), Chase Play (On/Off, Function, Time), Sequencer (Function, Start/Stop, Rec), Control Assign (Pedal Switch, C1, C2), Key Mode (Whole, Dual, Split), Edit (Patch, Tone, MIDI, Parameter Value, Name), Function Display, Recall, Upper/Lower Select (also used to move cursor), Copy, Write, Master Tune •Controls: Bender Lever, Control Assign (C1, C2), After-Touch Sensitivity, Master Volume, α -Dial •Switches: Bend Range Select, Voice Memory Select •Display: 32-Digit Fluorescent Display •Memory Cartridge Slot: 1 (accepts the M-16C and the M-64C) •Rear Panel: Jacks (Mix Output, Parallel Output x 4, Headphones, Pedal Hold, Control Assign), Connectors (MIDI In, MIDI Out, MIDI Thru, Programmer In), Switches (Output Level, Memory Protect, Power) •Dimensions: 1,186(W) x 375(D) x 101(H) mm (46-11/16" x 14-3/4" x 4") •Weight: 14 kg (30 lb, 14 oz.) •Accessories: Connection Cord x 2, M-16C Memory Cartridge, M-64C Memory Cartridge, Edit Map, Music Rest

PG-800 PROGRAMMER



JX-8P POLYPHONIC SYNTHESIZER



The JX-8P is velocity and pressure sensitive. Velocity information is used to control the DCO pitch, the mix balance between the DCO-1 and DCO-2, the VCF cutoff frequency, and the VCA level. Three levels of velocity sensitivity can be selected. Pressure information is used to control the vibrato depth, the brilliance, or the volume. Even the slightest change in touch is reflected in the sound.

Two DCOs and, for the first time in this price range, two Envelope Generators are used to produce each voice. Other synthesizer elements, extensive modulation controls, and dynamics capability allow the JX-8P to produce more impressive sounds than ever before—from crystal-clear sounds to screaming sounds.

The JX-8P offers 64 preset patches including extremely thick string sounds, cross-modulated metallic sounds, a variety of special effect sounds, and many more. It can also store 32 programmable patches. In addition, the optional M-16C memory cartridge provides 32 programmable patches. A total of 128 patches can be instantly recalled even during a performance. The Edit function allows all patch parameters to be delicately controlled so as to modify a preset patch or to create a new patch. The optional PG-800 programmer can be used to facilitate editing.

The JX-8P offers yet one more amazing function: you can name the patch you created and store it in the JX-8P memory. When the patch is recalled, a newly developed FIP display spells out the patch name. The display also spells out the parameter name when it is edited. You can easily select the desired patch and recall the desired parameter even on a dark stage.

A Patch Chain function allows the JX-8P to memorize up to 8 combinations of patch, key mode, whether the pressure information is activated or not, bend range, whether the portamento is activated or not, portamento time, LFO modulation depth, and whether the Unison Detune function is activated or not. These combinations can be recalled instantly. This function is especially effective for live performance.

In addition to these exciting features, the JX-8P offers full MIDI compatibility. It can be used as a mother keyboard for any MIDI set-up and brings out the best in all connected MIDI instruments.

Despite its tremendous capabilities and attractive features, the JX-8P weighs only 11.5 kilograms.

REAR PANEL



SPECIFICATIONS

- Keyboard: 61 Keys (5 octaves, C scale) •Memories: 64 Preset Patches, 32 Internal Programmable Patches, 32 External Programmable Patches (M-16C) •Edit: Patch Parameters, Patch Name, MIDI Function, Master Tune •Touch Pads: Patch Select (1 to 32), Bank Select (Preset, Internal, Cartridge), Patch Chain (Enter ◀ ▶), Key Mode (Poly, Unison, Solo), After Touch (Vibrato, Brilliance, Volume), Copy (Cartridge to Memory, Memory to Cartridge) •Controls: Volume, After Touch, Edit, Bend Range Select, Pitch Bend/LFO Lever, Portamento Time, Portamento On/Off •Display: 16-digit FIP display •Memory Cartridge Slot: 1
- Jacks: Phone Output x 2 (Stereo, Mono, 7.5kΩ), Headphones (8Ω stereo), Hold Pedal (DP-2) •Connectors: MIDI (In, Out, Thru, 5-pin DIN sockets), Programmer In (6-pin DIN socket) •Switches: Output Level (L/M/H), Memory Protect (On/Off/On) •Dimensions: 977(W) x 375(D) x 92(H) mm (38-7/16" x 14-3/4" x 3-5/8") •Weight: 11.5 kg (25 lb. 6 oz.)
- Accessories: Connection Cord x 2, Music Rest



PG-800 PROGRAMMER



The PG-800 is a programmer designed exclusively for use with the JX-8P. It facilitates creation of new patches and modification of preset patches. All JX-8P parameters can be controlled by the PG-800's sliding controls.

Light and compact, the PG-800 neatly fits on top of the JX-8P and is held in place by a magnetic seat. It also comes complete with a carrying case.

SPECIFICATIONS

•DCO-1: Range (2', 4', 8', 16'), Waveform (\sim , \square , \square , Noise), Tune (± 1 oct.), Frequency Modulation (LFO, ENV), Dynamics Select (Off/1/2/3), Envelope Mode (\sim , \sim) •DCO-2: Same as the DCO-1 plus Cross Modulation (Off/1/2/3) and Fine Tune •Mixer: Level (DCO-1, DCO-2), Envelope Modulation, Dynamics Select (Off/1/2/3), Envelope Mode (\sim , \sim) •HPF: 0/1/2/3 •VCF: Cutoff Frequency, Resonance, LFO Modulation, Envelope Modulation, Key Follow, Dynamics Select (Off/1/2/3), Envelope Mode (\sim , \sim) •VCA: Mode (ENV-2, Gate, \square), Level, Dynamics Select (Off/1/2/3) •ENV-1: Attack Time, Decay Time, Sustain Level, Release Time, Key Follow (Off/1/2/3) •ENV-2: Same as the ENV-1 •LFO: Waveform (\sim , \square , Random), Delay Time, Rate •Chorus: Mode Select (Off/1/2) •Function: Manual, Write •Jack: 6-pin DIN •Dimensions: 265(W) x 215(D) x 27(H) mm (10-7/16" x 8-7/16" x 1-1/16") •Weight: 680 g (1 lb. 8 oz.) •Accessories: 6-pin DIN Cable, Carrying Case

***α*JUNO-2** POLYPHONIC SYNTHESIZER



Easy operation, professional-quality versatility, and sophisticated sound synthesis have made Roland's JUNO series of synthesizers extremely popular. By further improving these "JUNO" features and combining them with a variety of new features, Roland's *α*JUNO is ideal for all players and all playing situations.

Two *α*JUNO models are available: The *α*JUNO-1 and the *α*JUNO-2. There are only three major differences between them. The first difference is the keyboard. The *α*JUNO-1 has 49 keys while the *α*JUNO-2 has 61 keys. Using Key and Octave Transpose functions, both models can produce the sounds over an 8-octave range. The MIDI note messages for the note range can be transmitted and received. The second difference is the dynamics sensitivity. The keyboard of the *α*JUNO-2 is velocity and pressure sensitive, allowing the player to control some sound elements by the force applied to the keyboard. The keyboard of the *α*JUNO-1 is neither velocity nor pressure sensitive, although the player can control these sound elements using the EV-5 Expression Pedal. Both models can receive MIDI velocity and pressure messages, however. The third difference is the external memory. Both the *α*JUNO-1 and *α*JUNO-2 provide 64 preset patches and can internally store 64 programmable patches. Programmable patches can also be externally stored. In the case of the *α*JUNO-1, patch data can be stored on cassette tapes through a Tape Interface. The *α*JUNO-2, on the other hand, uses an M-64C Memory Cartridge to store 64 programmable patches.

The *α*JUNO's DCO incorporates a newly developed LSI which can produce 14 basic waveforms. The *α*JUNO also features a new 8-parameter envelope generator which can create much more complicated envelope curves than a conventional ADSR envelope generator can. The *α*JUNO thus allows the creation of stunningly realistic sounds far beyond the scope of ordinary synthesizers in both variety and quality.

A conventional synthesizer such as the JUNO-106 has numerous controls on its front panel for controlling sound synthesis. The *α*JUNO, on the other hand, has a single "α-Dial" which alone controls all functions including those for sound synthesis. This makes the *α*JUNO tremendously simple in both appearance and operation. The *α*JUNO also features an illuminated LCD which is easy to read even on a dark stage.

On top of all that, there's a completely new "Tone Modify" function that dramatically facilitates sound editing. In fact, even a person who knows next to nothing about a synthesizer can easily tailor the sound to his taste. Four "Tone Modify" parameters are available: Brilliance, Envelope Time, Modulation Rate, and Modulation Depth. Operation is incredibly simple. Recall a parameter by pressing a button, then rotate the α-Dial to change the parameter value. Arrows appearing on the display indicate whether the parameter value is increasing or decreasing. Several patch parameters for brilliance, envelope time, modulation rate, or modulation depth can be simultaneously adjusted.

The *α*JUNO also features an Edit function that allows temporary modification of the preset patches and creation of new patches. As many as 36 kinds of patch parameters are provided. All of the *α*JUNO's parameters can be recalled and adjusted using just the α-Dial.

By combining the Edit and Tone Modify functions, you can easily and quickly modify the preset patches or create new patches. First select a preset patch, then modify the patch with the Tone Modify function. Finally, refine the modification by recalling and adjusting the patch parameters with the α-Dial. The display then shows the parameter name and both the pre- and post-adjusted parameter values.

The *α*JUNO has two kinds of Transpose functions. One is the Octave Down function. It allows the note range to be instantly transposed one octave below by pressing the Octave Transpose button. The other is a convenient Key Transpose function. It allows the note range to be chromatically transposed within the upper and lower octave range. You can play compositions written in hard-to-play keys in the key that is most comfortable for you.

Like the AXIS-1 MIDI keyboard, the *α*JUNO features a Chord Memory function. The function allows a chord pattern to be memorized by the *α*JUNO and then performed by pressing a single key. Complicated chords, even chords that are physically impossible to play by hand, can be easily performed. The Chord Memory function can also be used to produce extremely broad, thick sounds with a complex harmonics series.

The bender lever on the *α*JUNO can control both pitch bending and modulation. The pitch bending can be applied to



all preset and programmable patches. You can pre-program the bend range individually for each patch within one octave in half-note steps. When controlling the modulation, the bender lever can sense the pressure applied to it. The harder you press the lever, the deeper the modulation. Pressure sensitivity is also programmable. The portamento effect can be activated at the touch of a button. The portamento time can be set at one of 128 steps. By combining the portamento and the Chord Memory function, you can easily produce an extremely thick polyphonic portamento effect.

Three jacks are provided on the rear panel of both the **αJUNO-1** and **αJUNO-2**. The **αJUNO-1** has Pedal Hold, Pedal Switch, and Foot Control jacks. The **αJUNO-2** has Pedal Hold, Pedal Switch, and Expression Pedal jacks. The Pedal Hold jack is used to connect an optional DP-2 foot switch to turn the hold function on and off. The Expression Pedal jack is used to connect an optional EV-5 to control the volume. You can select which functions will be controlled by the Foot Control and the Pedal Switch jacks. The Foot Control jack connects with the DP-2 foot switch so as to shift the patch number from 1 to 8, turn the portamento on and off, or turn the Chord Memory function on and off. The Pedal Switch jack connects with the EV-5 expression pedal to control the volume, the pressure sensitivity, or the velocity sensitivity.

Offering extensive MIDI implementation, the durable **αJUNO** can function accurately in any MIDI set-up. You can set whether or not the MIDI messages for a variety of functions are to be transmitted and received. You can select the function you wish to set by pressing the MIDI button, then turn the function on or off by rotating the **α-Dial**. And you can temporarily set the MIDI functions or let the **αJUNO** store the settings in the memory.

αJUNO-2 REAR PANEL



αJUNO-1 REAR PANEL



αJUNO-1 POLYPHONIC SYNTHESIZER



αJUNO-2 SPECIFICATIONS

- Keyboard: 61 Keys, 5 Octaves (C to C), Velocity and Pressure Sensitive
- Memory: 64 Preset Patches, 64 Programmable Patches (64 external programmable patches per M-64C memory cartridge)
- Group Select Buttons: Preset, Memory, Cartridge
- Buttons: Bank (1 to 8), Number (1 to 8), Tune/Function, MIDI, Key Transpose, Data Transfer, Parameter Select, Value, Name, Write, Tone Modify Mode (Modulation Rate, Modulation Depth, Brilliance, Envelope Time)
- Controls: **α-Dial**, Volume knob, Octave Transpose buttons (Normal, Down), Portamento button, Chord Memory button, Pitch Bender/Modulation lever
- Display: 16-digit, illuminated LCD
- LEDs: Key Transpose, Octave Transpose (Normal, Down), Portamento, Chord Memory
- Rear Panel: Output jacks (Mono, Stereo), Headphone jack, Hold Pedal jack, Pedal Switch jack, Expression Pedal jack, Memory Protect switch, MIDI connectors (In, Out, Thru), Memory Cartridge slot, Power switch
- Dimensions (w/o music rest): 972(W) × 246(D) × 85(H) mm (38-1/4" × 9-11/16" × 3-3/8")
- Weight (w/o music rest): 75 kg (16 lb. 9 oz.)
- Accessories: Music Rest, Connection Cable

αJUNO-1 SPECIFICATIONS

- Keyboard: 49 Keys, 4 Octaves (C to C)
- Memory: 64 Preset Patches, 64 Programmable Patches
- Group Select Buttons: Preset, Memory
- Buttons: Bank (1 to 8), Number (1 to 8), Tune/Function, MIDI, Key Transpose, Data Transfer, Parameter Select, Value, Name, Write, Tone Modify Mode (Modulation Rate, Modulation Depth, Brilliance, Envelope Time)
- Controls: **α-Dial**, Volume knob, Octave Transpose buttons (Normal, Down), Portamento button, Chord Memory button, Pitch Bender/Modulation lever
- Display: 16-digit, illuminated LCD
- LEDs: Key Transpose, Octave Transpose (Normal, Down), Portamento, Chord Memory
- Rear Panel: Output jacks (Mono, Stereo), Headphone jack, Hold Pedal jack, Pedal Switch jack, Foot Control jack, Save jack, Load jack, Memory Protect switch, MIDI connectors (In, Out, Thru), Power switch
- Dimensions (w/o music rest): 802(W) × 240(D) × 79(H) mm (31-9/16" × 9-7/16" × 3-1/8")
- Weight (w/o music rest): 5.4 kg (11 lb. 14 oz.)
- Accessories: Music Rest, Connection Cable

PG-300 PROGRAMMER



EV-5 EXPRESSION PEDAL



EP-50 ELECTRONIC PIANO



Roland's EP-50 electronic piano is fully MIDI compatible and features a full-sized 76-key, touch-sensitive keyboard. It can be used either as an ordinary electronic piano or as a keyboard controller for other MIDI instruments. In any situation, from on-stage performance to jamming or home recording, the EP-50's exquisite sounds will enchant you as its MIDI compatibility maximizes the performance of your MIDI system.

The EP-50 features a 76-key, touch-sensitive keyboard. Any change in your touch affects the sound, from the subtlest pianissimo to the most powerful fortissimo.

The EP-50 features MIDI In, Out, and Thru connectors. It can also transmit and receive MIDI program change, key, and velocity messages. The MIDI channel can be freely assigned, too. The EP-50 can be used as an 8-voice polyphonic MIDI keyboard controller for other MIDI sound-producing units, including Roland's MKS MIDI sound modules. Or it can be used as a piano sound source for a MIDI sending unit such as a MIDI sequencer or computer.

The EP-50 offers one Harpsichord and three Piano sounds. All sounds can be recalled at the touch of a button. A Chorus effect is provided to broaden the sound. And the sustain effect can be controlled by connecting the accessory DP-2 pedal switch. A Key Transpose function is provided so that you can transpose to any key you desire.

Two built-in speakers, each with 4.5 watts of power, project stunning sounds. The volume is adjustable and the speakers can be turned off if you don't need them. Headphones can also be connected. You can play the EP-50 any time, day or night, without disturbing others. External amplification such as a keyboard amplifier or hi-fi system can be connected to the Output jacks to increase the volume. The Stereo Input jacks allow a stereo device, such as a cassette tape recorder, to be connected.

Light, compact, and easy to carry, the fully electronic EP-50 never needs to be tuned.

REAR PANEL



SPECIFICATIONS

•Keyboard: 76 Keys •Buttons: Transpose, Piano I, Piano II, Piano III, Harpsichord, Chorus, MIDI Control •Controls: Volume, Tune (± 35 cents)
•Switch: Monitor On/Off •Rear Panel: Jacks (Input $\times 2$, Output $\times 2$, Headphones, Damper Pedal), MIDI Connectors (In, Out, Thru), Output Level Select Switch (L/M/H) •Speakers: 16cm (4.5W) $\times 2$ •Dimensions: 1,152(W) \times 369(D) \times 104(H) mm (45-3/8" \times 14-1/2" \times 4-1/8") •Weight: 15 kg (33 lb. 1 oz.) •Accessories: Music Rest, DP-2 Pedal Switch





MIDI INTERFACE SERIES

MPU-101 MIDI to CV INTERFACE



The MPU-101 converts MIDI messages into analog signals. Connecting the MPU-101 to a MIDI sending unit, up to four conventional 1-volt/octave CV/gate synthesizers can be controlled by MIDI messages.

The MPU-101 has four output channels, each with pitch control voltage, gate signal, and dynamics control signal outputs. There are also control voltage outputs for bender, modulation, after touch, and volume. Voltage-controlled devices other than synthesizer, including lighting equipment, can also be controlled. And the gate signals can also be used as trigger signals to control other devices.

The MIDI channel can be assigned to one of 1 to 16. A MIDI Out connector is provided in addition to the MIDI In and Thru connectors. Up to 8 CV synthesizers can be controlled by combining two MPU-101's.

Five operation modes are provided for a variety of applications.

1. Mono Mode: Four CV synthesizers can be controlled by MIDI messages transmitted on four different MIDI channels.
2. 2-Voice Mode: MIDI messages for up to two notes are converted into CV/gate signals and come through outputs 1 and 2.
3. 3-Voice Mode: MIDI messages for up to three notes are converted into CV/gate signals and come through outputs 1, 2, and 3.
4. 4-Voice Mode: MIDI messages for up to four notes are converted into CV/gate signals and come through outputs 1, 2, 3, and 4.

When the connected MIDI sending unit is in the poly mode, three different assign modes are accessible, then the MIDI key messages can be assigned to four outputs in three different ways. An Octave Transpose function simultaneously shifts the pitch control voltage of four CV outputs one octave up or down.

SPECIFICATIONS

•MIDI Channel Selector: 1 to 16 •Octave Transpose: L/M/H •Assign Modes: I/II/III •Operation Modes: Mono, 2-Voice, 3-Voice, 4-Voice, Special •Hold: Disable/Enable •Clear: Push On •Tune: On/Off Switch, Control (± 100 cents) •Output Jacks (Voltage): CV (-3 to +758V) x 4, Dynamics (0 to +10V) x 4, Gate (Off: 0V, On: +14V) x 4, Bender (-1 to +1V), Modulation (0 to +10V), After Touch (0 to +10V), Volume (0 to +10V) •Indicators: Power, Gate x 4, Hold, Operation Mode x 5 (Mono, 2-Voice, 3-Voice, 4-Voice, Special) •MIDI Connectors: In, Out, Thru •Dimensions: 226(W) x 226(D) x 81(H) mm (8-7/8" x 8-7/8" x 3-3/16") •Weight: 2.1 kg (4 lb. 10 oz.) •Accessory: 1.5m MIDI Cable



MPU-103 MIDI CHANNEL FILTER/CONVERTER



The MPU-103 MIDI Channel Filter/Converter reassigns the MIDI channel: it accepts MIDI messages transmitted on the MIDI channel selected by the Filter switch, then sends that messages on the MIDI channel selected by the Converter switch.

MIDI messages other than key event message can be eliminated using the Key Event Only switch. A MIDI indicator lights when the MPU-103 accepts MIDI message.

SPECIFICATIONS

•Switches: Filter Channel Select, Converter Channel Select, Converter On/Off, Key Event Only On/Off •Indicators: MIDI, Power •MIDI Connectors: In, Out, Thru •Power Source: DC 9V by PSA series AC Adaptor •Current Draw: DC 9V, 200 mA •Dimensions: 218(W) x 167(D) x 46(H) mm (8-9/16" x 6-9/16" x 1-13/16") •Weight: 930 g (2 lb. 1 oz.) •Accessory: AC Adaptor (PSA series)



MPU-104 MIDI INPUT SELECTOR



MPU-105 MIDI OUTPUT SELECTOR



Two MIDI devices can be easily connected with just one cord. But when more MIDI devices are used, the connections often become complicated and troublesome.

The MPU-104 and MPU-105 solve this problem completely.

The MPU-104 has five MIDI In and one MIDI Thru connectors. The MIDI Thru connector sends only the MIDI messages selected MIDI In connector accepts. The MPU-105 has one MIDI In and five MIDI Thru connectors. Each MIDI Thru connector can be turned on and off individually.

A patchbay for MIDI devices can be formed by combining the MPU-104 and MPU-105.

MPU-104 SPECIFICATIONS

•Connector Select Switches: 1 to 5 •MIDI Connectors: In x 5, Thru x 1 •Indicators: Connector Numbers (1 to 5), MIDI, Power •Power Source: DC 9V by PSA series AC Adaptor •Current Draw: DC 9V, 5 mA •Dimensions: 218(W) x 157(D) x 46(H) mm (8-9/16" x 6-3/16" x 1-13/16") •Weight: 900 g (2 lb.) •Accessory: AC Adaptor (PSA series)



MPU-105 SPECIFICATIONS

•Connector Select Switches: 1 to 5 •MIDI Connectors: In x 1, Thru x 5 •Indicators: Connector Numbers (1 to 5), MIDI, Power •Power Source: DC 9V by PSA series AC Adaptor •Current Draw: DC 9V, 5 mA (when all LEDs lighting) •Dimensions: 218(W) x 157(D) x 46(H) mm (8-9/16" x 6-3/16" x 1-13/16") •Weight: 900 g (2 lb.) •Accessory: AC Adaptor (PSA series)



KEYBOARD AMPLIFIERS



Today's electronic musical instruments, such as synthesizers or electronic pianos, create an extremely broad frequency range and complex waveforms. To faithfully amplify and reproduce these electronic sounds the keyboard amplifier must have both sophisticated amplification circuitry and a superb speaker system.

Roland's Cube Keyboard amplifiers offer these and several other attractive features. The new 100-watt Cube-100 Keyboard joins the existing range of the popular Cube-60 Keyboard and Cube-40 Keyboard amplifiers.

CUBE-100 KEYBOARD (CK-100)

Driving a 3-way speaker system incorporating a newly developed 15-inch woofer, horn midrange and dome tweeter, the 100-watt Cube-100 Keyboard beautifully reproduces all keyboard sounds—punchy lows, well-balanced midrange, and brilliant highs.

The Cube-100 Keyboard has two channels, each of which has two input jacks, a volume control, and an attenuator switch. Two stereo-output keyboards or four mono-output keyboards can be connected to the Cube-100 Keyboard at one time. A 3-band equalizer (Treble, Middle, and Bass) lets you modify the tone to personal taste.

Several other connection jacks are provided to facilitate a greater variety of applications. Other amplifiers can be connected to increase the volume using the Pre-Out jack. The Main-In jack allows the Cube-100 Keyboard to be used as a powered speaker cabinet. The Pre-Out and

Main-In jacks can also be used together to create an effects loop. The Line-Out jack is convenient for connecting a tape recorder or a mixer. A Headphone jack is also provided for rehearsals or late-night practice.



SPECIFICATIONS

•Output: 100 W (rms) •Speakers: 38 cm (15") Woofer x 1, Horn Midrange x 1, Dome Tweeter x 1 •Controls: Volume (1 and 2)—pull attenuator on, Bass, Middle, Treble •Switch: Power •Jacks: Input 1 x 2, Input 2 x 2, Pre Out, Main In, Line Out, Headphones •Dimensions: 464(W) x 400(D) x 753(H) mm (18-1/4" x 15-3/4" x 29-5/8") •Weight: 31 kg (68 lb. 5 oz.) •Accessory: Vinyl Cover



CUBE-60 KEYBOARD (CK-60)

The 60-watt Cube-60 Keyboard—one of the world's most popular keyboard amplifiers—features a 2-way speaker system consisting of a 12-inch woofer and a horn tweeter. Two input channels are provided. Each input features an attenuator and offers a wide dynamic range. Two electric or electronic keyboards can be connected at one time.

In addition to a 3-band equalizer (Treble, Middle, and Bass), the Cube-60 Keyboard features a reverb circuit for which on/off switches and a depth control are provided.

A variety of connection jacks are provided for greater convenience. These include two Recording-Out jacks for recording, Pre-Out and Main-In jacks for an effect loop, a Headphone jack that allows you to practice without

disturbing others, and an External Speaker jack for connecting another speaker cabinet.



SPECIFICATIONS

•Output: 60 W (rms) •Speakers: 30 cm (12") Woofer x 1, Horn Tweeter x 1 •Controls: Volume (1 and 2)—pull attenuator on, Bass, Middle, Treble, Reverb •Switches: Reverb, Power •Jacks: Input 1, Input 2, Recording Out x 2, Pre Out, Main In, External Speaker, Headphones •Dimensions: 370(W) x 300(D) x 465(H) mm (14-9/16" x 11-13/16" x 18-5/16") •Weight: 16.5 kg (36 lb. 6 oz.) •Accessory: Vinyl Cover



CUBE-40 KEYBOARD (CK-40)

The 40-watt Cube-40 Keyboard features one 10-inch double-cone speaker. Two input channels, each with a volume control and an attenuator, allow two keyboards to be connected at the same time.

As with the Cube-60 Keyboard, a 3-band equalizer and reverb circuit are provided.

Connection jacks include two Recording-Out jacks, Pre-Out and Main-In jacks, and a Headphone jack.



SPECIFICATIONS

•Output: 40 W (rms) •Speaker: 25 cm (10") Double-Cone x 1 •Controls: Volume (1 and 2)—pull attenuator on, Bass, Middle, Treble, Reverb •Switch: Power •Jacks: Input 1, Input 2, Recording Out x 2, Pre Out, Main In, Headphones •Dimensions: 310(W) x 205(D) x 368(H) mm (12-3/16" x 8-1/16" x 14-1/2") •Weight: 11 kg (24 lb. 4 oz.) •Accessory: Vinyl Cover

KEYBOARD STANDS & ACCESSORIES

KEYBOARD STANDS

KS-2



An optional stand for the JX-8P, SUPER JX, MKB-200, or αJUNO-2.

KS-5



Almost all keyboards can be mounted on the KS-5. Its width can be freely adjusted between 710 and 982 millimeters and its height can be set at one of five positions between 660 and 820 millimeters.

KS-6



An optional stand for the αJUNO-1 or αJUNO-2.

KS-11



An optional stand for the RD-1000.

KS-1000



An optional stand for the MKB-1000.

CARRYING CASES

TB series (hard case)

TB-2U



TB-4U



TB-7U



TB-12U



For Roland MKS series sound modules or other rack mountable units.

SC series (soft case)

SC-1



For the AXIS-1.

SC-100



For the EP-50.

AB series (resin-molded case)

AB-2



For the JX-8P or MKB-200.

AB-3



For the αJUNO-1.

AB-4



For the αJUNO-2.

AC ADAPTORS

PSA series



KS-1100



An optional stand for the RD-1000.

MUSIC REST

MR-1



For the MKB-1000 or MKB-300.

STEREO HEADPHONES

RH-10



Ideal for monitoring.

CONNECTION CORDS

MIDI/SYNC CABLES

5-pin DIN plug	5-pin DIN plug	
MSC-07/07R/07Y	70cm x 2	Black/Red/Yellow
MSC-15/15R/15Y	1.5m x 1	Black/Red/Yellow
MSC-25/25R/25Y	2.5m x 1	Black/Red/Yellow
MSC-50/50R/50Y	5.0m x 1	Black/Red/Yellow
MSC-100	10.0m x 1	Black

5-pin DIN cable for connecting MIDI jacks or DIN Sync jacks on musical instruments or personal computers. Complete with identification labels for input and output.

FOOT SWITCHES

DP-2/6



Used for synthesizers and pianos.

FOOT SWITCHES

FS-1/2/3



On/Off control of two functions.

MEMORY CARTRIDGES

M-16C/64C



M-16C

For use with the RD-1000, MKS-2U, MKB-200, MKS-30, SUPER JX, or JX-8P.

M-64C

For use with the MKS-80, SUPER JX, or αJUNO-2.

BATTERIES

BR-2/3



BR-2

(UM-2 x 2)
UM-2 dry cell batteries

BR-3

(UM-3 x 4)
UM-3 dry cell batteries

PCS CORDS

Mini plug → Phone plug	
PCS-4	1.6m x 2 Green x 1, Brown x 1
Phone plug → Phone plug	
PCS-5	40cm x 2 Gray x 1, Green x 1
PCS-6	75cm x 2 Gray x 1, Green x 1
PCS-7	1.5m x 2 Brown x 1, Green x 1
Mini plug → Mini plug	
PCS-10	20cm x 2 40cm x 4 60cm x 2 Black x 1, Red x 1 Black x 2, Red x 2 Gray x 2
PCS-14	1.0m x 3 Gray x 1, Black x 1, Red x 1
8-pin DIN plug → 8-pin DIN plug	
PCS-15	1.0m x 1 Black

		
PCS-16	30 cm x 1	Black
		
PCS-17	1.5 m x 1	Black
		
PCS-18	10 cm x 5	Black x 5
PCS-19	70 cm x 1	Black
		
PCS-20	1.0 m x 1	Black


PIN JACK CORD

Angle phone plug	Pin plug	Phone plug
PJ-1	2.5m x 1	Black

The PJ-1 is an angle phone-to-pin cord with a pin-to-phone adaptor.



*Specifications and appearance subject to change without notice.



S/A Sound Synthesis— An Advanced Technology for Creating Realistic Sounds

Roland's new Structured/Adaptive Synthesis technology (S/A Synthesis) is a proprietary method of digital sound re-synthesis developed specifically for the emulation of percussive, acoustic sounds.

The result of years of extensive research efforts by Roland engineers, S/A Synthesis faithfully reproduces all the richness, warmth, and expressiveness associated with acoustic piano sounds over all eighty-eight notes from pianissimo to fortissimo, as well as other acoustic keyboard instruments including harpsichord, clavi, vibraphone, and electric piano.

The development of S/A Synthesis entailed a computer-assisted analysis and restructuring of the unique sounds produced by each individual key on several different acoustic keyboard instruments over their entire dynamic range. First came the discovery of the several distinctive waveforms that essentially characterize an acoustic piano sound. This was followed by a correlation between the changes in the harmonic structure of these waveforms with variations in pitch and loudness. Next, an advanced digital algorithm of these complex harmonic relationships was created. This painstaking research now enables Roland to offer highly expressive electronic musical instruments utilizing advanced VLSI (Very Large Scale Integration) hardware and software technology.

For the creation of acoustic keyboard sounds, Roland's proprietary S/A Synthesis overcomes all the limitations found in previous technologies, such as PCM sampling. The results can be heard in the amazingly realistic sounds of Roland's new RD-1000 Digital Piano and MKS-20 Digital Piano Module. Through the development of S/A Synthesis and advanced electronic instruments that capture the full dynamic sensitivity and expressiveness of acoustic keyboards, Roland demonstrates a continuing commitment to provide the latest in state-of-the-art music technology.

RD-1000 DIGITAL PIANO



Incorporating a digital sound source made possible by S/A synthesis, the 16-voice polyphonic RD-1000 Digital Piano offers the realism and expressiveness that will satisfy the most demanding professional musicians. Its keyboard is velocity sensitive and has eighty-eight wooden keys. The keyboard was designed so as to complement the tremendous potential of the digital sound source. Its precise, comfortable key action responds perfectly to any subtle change in touch, allowing the same personalized expressiveness of an acoustic piano. The velocity sensitivity can match any musician's playing style or technique because the RD-1000 offers four touch sensitivity curves (A to D) to determine how the volume and tone color change according to changes in touch. The selected touch sensitivity curve is also used to determine the value of the MIDI velocity messages transmitted by the RD-1000. The RD-1000 also features a Key Lock function which secures the keyboard mechanism and protects it against shock and vibration during transportation.

The RD-1000 stores eight preset sounds in the first bank of its internal memory, including three different Pianos, Harpsichord, Clavi, Vibraphone, and two different Electric Pianos. The RD-1000 features a special Voice Preserve function that changes the sound naturally. When a Voice Selector button is pressed, the sound is sustained with no change until the depressed keys or damper pedal is released. There are never any sudden, annoying changes in sound. This is especially advantageous for live performances. The tuning can be easily adjusted using the α -Dial by setting the pitch of the note A between 438.0 and 446.0 Hz in 0.1 Hz steps. Chorus and Tremolo effects are also provided and can be activated at the touch of a button. Damper and soft pedals are located on the separate Pedal Unit. The Pedal Unit is also used to supply the power to the RD-1000. A Key Transpose function is also provided. When the function is engaged, the display indicates both the pre-transposed and post-transposed keys. For greater connecting flexibility, the RD-1000 features phone jacks and XLR connectors for outputs.

The RD-1000 offers 10 programmable parameters to freely tailor the preset sound. The parameters include Voice Level, Bass Level, Middle Level, Middle Frequency, Middle Bandwidth, Treble Level, Chorus Rate, Chorus Depth, Tremolo Rate, and Tremolo Depth. An α -Dial and an illuminated LCD (2 lines, each 20 characters long) facilitate editing. The edited sounds can be stored in the RD-1000 or in the M-16C memory cartridge. There are eight memory banks in the RD-1000. Bank 1 is used to store preset sounds. Each of the remaining 7 memory banks is used to store the edited sounds of eight preset sounds. A total of 56 edited sounds can thus be stored in the RD-1000. There are also eight memory banks in the M-16C. Each memory bank stores the edited sounds of eight preset sounds. A total of 64 edited sounds can thus be stored in the M-16C. The edited sounds stored in the M-16C can also be loaded into both the MKS-20 Digital Piano Module and the RD-1000.

With superb keyboard and realistic digital sound source, the RD-1000 is an exceptional performer either as a MIDI keyboard controller or a MIDI sound source and is velocity sensitive in either case. When used as a MIDI keyboard controller, the superior touch sensitivity of the RD-1000 keyboard allows the musician to control the slaved MIDI instruments with greater expressiveness than ever before. MIDI transmitted channel can be set at anywhere between 1 and 16. And from 1 to 128 MIDI program change messages can be transmitted. In addition, the RD-1000's External Volume control and an Expression Pedal connected to the Pedal Unit can be used to transmit MIDI control change messages. Six combinations of the MIDI control change messages are available. When used as a MIDI sound source, the RD-1000 opens up new dimensions in realistic expression for any MIDI set-up. The RD-1000 can receive from 1 to 64 MIDI program change messages. MIDI received channel can be set at anywhere between 1 and 16. And the Omni mode can be turned on and off.



REAR PANEL



SPECIFICATIONS

- Sound Source: 16-Voice Polyphonic Digital Sound Source Incorporating S/A Synthesis •Keyboard: 88 Wooden Keys •Memory: 8 Preset Sounds, 56 Programmable Sounds (7 edited sounds of each preset sound) •Switch: Output Level Select •Memory Cartridge Slot: 1 •MIDI Connectors: In, Out, Thru •Jacks on the RD-1000: Headphones, Phone Output (L, R), XLR Output (L, R, 600Ω), Pedal Unit Cable In •Jacks on the Pedal Unit: Expression Pedal, AC Inlet •RD-1000 Dimensions: 1,352(W) × 557(D) × 154(H) mm (53-1/4" × 21-15/16" × 6-1/16") •Pedal Unit Dimensions: 600(W) × 333(D) × 98(H) mm (23-5/8" × 13-1/8" × 3-7/8") •RD-1000 Weight: 43.5 kg (95 lb. 14 oz.) •Pedal Unit Weight: 8.5 kg (18 lb. 12 oz.) •Accessories: Connection Cord × 2, Power Cord

MKS-20 DIGITAL PIANO MODULE



The rack-mountable MKS-20 Digital Piano Module incorporates the same digital sound source as the RD-1000. The realistic acoustic sounds produced by S/A synthesis can be controlled by any MIDI sending unit, including a MIDI keyboard controller, synthesizer, α-DRUM, and OCTAPAD. The MKS-20 can also be incorporated within any MIDI system such as the Roland MPU Music System.

The MKS-20 features the same preset sounds, editing parameters, and memory functions as the RD-1000. In addition, the MKS-20 offers an Octave Shift function which shifts the note range of the received MIDI messages between the lower and upper two octaves in one-octave steps. The MKS-20 also allows the user to determine whether or not it receives MIDI program change messages, whether or not the Chorus and Tremolo effects are turned on and off by MIDI messages, and whether or not the Voice Preserve function is applied to the MIDI program change messages.

REAR PANEL



SPECIFICATIONS

- Sound Source: 16-Voice Polyphonic Digital Sound Source Incorporating S/A Synthesis •Memory: 8 Preset Sounds, 56 Programmable Sounds (7 edited sounds of each preset sound) •Switch: Output Level Select •Memory Cartridge Slot: 1 •MIDI Connectors: In, Thru •Jacks: Headphones, Phone Output (L, R), XLR Output (L, R, 600Ω), AC Inlet •Dimensions: 480(W) × 400(D) × 90(H) mm (18-7/8" × 15-3/4" × 3-9/16") •Weight: 8 kg (17 lb. 10 oz.) •Accessories: MIDI Cable, Connection Cord × 2





MKB-1000 MIDI KEYBOARD CONTROLLER



Roland's MKB MIDI keyboard controller has no sound source of its own. Sound comes from MIDI devices connected to it. The MKB-1000 has 88 wooden keys, the MKB-300 has 76 keys. Both are velocity sensitive. Even the slightest changes in touch can be converted into MIDI velocity messages.

A 10-step Dynamics select switch is provided on the rear panel to adjust the velocity sensitivity to the player's taste.

All the controls needed to select the MIDI functions are placed on the front panel for easy operation. The Mode switch selects either the MIDI Poly or Mono mode. Key transpose is easily achieved even during a performance using a sliding control. The MKB keyboard controller can store up to 128 kinds of all front-panel control settings except the Bender. The stored settings can be instantly recalled and are protected by a back-up battery.

The Floating Split function allows the split point between the upper and lower parts of the keyboard to be assigned at will. Then the display indicates the key name on which the split point is located. MIDI channels can be assigned individually to the lower and upper parts. The Key Mode select switch can then determine the manner in which the MIDI messages are transmitted. In the "Whole U" mode, MIDI messages for the entire keyboard are transmitted on the upper MIDI channel. In the "Whole L" mode, MIDI messages are transmitted on the lower MIDI channel. In the "Split" mode, MIDI messages for the upper part are transmitted on the upper MIDI channel and MIDI messages for the lower part are transmitted on the lower MIDI channel. In the "Dual" mode, MIDI messages for the entire keyboard are transmitted on both MIDI channels simultaneously, allowing two sounds to be layered.

Both models can transmit MIDI program change messages (0 to 127) on each upper and lower MIDI channels. MIDI bender and modulation messages can be transmitted on both upper and lower channels or on the upper channel only. And MIDI soft pedal and damper pedal messages can be transmitted on either the upper or lower channel or on both together. The depth and rise time of the modulation are adjusted by sliding controls. Modulation can also be turned on and off with a pedal switch.

MKB-300 MIDI KEYBOARD CONTROLLER



REAR PANEL



SPECIFICATIONS

- MKB-1000 Keyboard: 88 Wooden Keys •MKB-300 Keyboard: 76 Keys
- Buttons: Lower MIDI Channel Assign (Up, Down), Upper MIDI Channel Assign (Up, Down), Lower Operation Mode Select (Poly, Mono), Upper Operation Mode Select (Poly, Mono), Key Mode Select (Dual, Split, Whole L, Whole U), Program/Patch Select (Bank 1 to 8, Number 1 to 16), Panel Mode Select (Memory, Lower Program Change, Upper Program Change), Memory Write
- Switches: Memory Protect (On/Off), Key Transpose (A # to F)
- Left-Hand Controls: Bend/Modulation Lever, Depth Slider, Rise Time Slider, All Button, Upper Only Button
- Rear Panel: Damper Pedal Jacks (L+U, L), Soft Pedal Jacks (L+U, L), Modulation Jack, MIDI Connectors (In x 1, Out x 4, Thru x 1), Dynamics Sensitivity Select Switch (10 steps)
- MKB-1000 Dimensions: 1,471(W) x 584(D) x 145(H) mm (57-15/16" x 23" x 5-11/16")
- MKB-300 Dimensions: 1,252(W) x 431(D) x 115(H) mm (49-5/16" x 16-15/16" x 4-1/2")
- MKB-1000 Weight: 49.5 kg (109 lb. 2 oz.)
- MKB-300 Weight: 18.5 kg (40 lb. 12 oz.)
- MKB-1000 Accessories: DP-6 Pedal Switch, Power Cord
- MKB-300 Accessories: DP-2 Pedal Switch, Power Cord

MKB-200 MIDI KEYBOARD CONTROLLER



Within a compact package, the 61-key MKB-200 MIDI keyboard controller packs a variety of functions that allow complete control of any MIDI sound-producing unit. Its keyboard is velocity and pressure sensitive, enabling the player to subtly and expressively control all connected MIDI devices. Five different levels of velocity sensitivity can be selected.

The MKB-200 can transmit MIDI mode messages (selection of poly or mono mode, and on and off of the omni mode). And the Key Transpose function chromatically shifts the note range from one octave below to one octave above. The shifted note range can be confirmed on the display.

The Floating Split function allows the split point to be placed at any desired position. MIDI channels can then be individually assigned to the upper and lower parts of the keyboard. Four key modes are provided to determine the manner in which MIDI messages are transmitted. In the Whole U or Whole L mode, MIDI messages for the entire keyboard are transmitted on the upper or lower MIDI channel. In the Split mode, MIDI messages for the upper part of the keyboard are transmitted on the upper MIDI channel and MIDI messages for the lower part of the keyboard are transmitted on the lower MIDI channel. In the Dual mode, MIDI messages for the entire keyboard are transmitted simultaneously on both the upper and lower MIDI channels.

The volume of the sound sources controlled by the upper and lower parts of the keyboard can be independently adjusted using sliding controls. Two other functions can be assigned to the sliding controls. The one is to transmit one of 122 MIDI control change messages. The other is to transmit one of 16 MIDI exclusive messages to the MKS-7 or the JUNO-106.

Up to 128 different MKB-200 settings can be stored on the supplied M-16C memory cartridge. Each setting includes the positions of the upper and lower volume controls, selection of the key mode (Dual, Split, Whole L, or Whole U), location of the split point, selection of the program change numbers (upper and lower), assignment of the MIDI channels (upper and lower), selection of the velocity sensitivity, the on or off setting of the pressure function, and the state of the key transpose function.

REAR PANEL



SPECIFICATIONS

•Keyboard: 61 Keys, Velocity and Pressure Sensitive •Buttons: Function, Key Mode (Whole U, Whole L, Split, Dual), Select (Lower, Upper), Group (A/B), Bank (1 to 8), Number (1 to 8), Program Change, Patch Change, Write, All, Upper Only •Controls: Volume Slider (Lower, Upper), Bender Lever, Depth Slider, Rise Time Slider •Display: 7-Segment LED x 2 •Memory Cartridge Slot: 1 •Rear Panel: Volume Jack (L+U, L), Damper Jack (L+U, L), Shift Jack (Down, Up), Modulation Jack, MIDI Connector (Out x3), Power Switch •Dimensions: 990(W) x 320(D) x 120(H) mm (39" x 12-5/8" x 4-3/4") •Weight: 10 kg (22 lb. 1 oz.) •Accessory: M-16C Memory Cartridge